Listing and Amendments to the Claims

This listing of claims will replace the claims that were published in the PCT Application:

Claims 1-19 are cancelled.

20. (new) (A power supply comprising:

a source of an energizing supply voltage;

a first capacitor;

a second capacitor;

a switch for periodically coupling said first capacitor and said second capacitor to form a capacitive voltage divider with respect to said energizing supply voltage to produce a first portion of an output in said second capacitor; and

an impedance coupled to said source of said energizing supply voltage and to said second capacitor in a manner that bypasses said first capacitor for producing a second portion of the output in said second capacitor.

21. (new) The power supply of claim 20, wherein said switch is coupled to said second capacitor for selectively coupling said first capacitor to said second capacitor in a negative feedback manner to regulate said second supply voltage.

22. (new) The power supply of claim 20, wherein the switch is responsive to a control signal from a control circuit which senses said second portion of the output and compares said sensed voltage with a reference voltage, for selectively coupling said first capacitor to said second capacitor.

23. (new) The power supply of claim 20, wherein said switch is coupled between said first and second capacitors and responsive to a control signal from a control circuit for selectively coupling said first and second capacitors.

24. (new) The power supply of claim 20, wherein the switch comprises a shunt circuit across said second capacitor for selectively coupling said first and said second capacitors.

25. (new) The power supply of claim 20, wherein the switch comprises at least one transistor.

26. (new) The power supply of claim 20, wherein a first diode is coupled between the first and second capacitors, and wherein said second capacitor has a first terminal coupled to a reference potential.

27. (new) The power supply of claim 26, wherein a second diode is coupled between the first capacitor and said reference potential.

28. (new) The power supply of claim 20, wherein the source of periodic input supply voltage comprises an AC source coupled to a rectifier.

29. (new) The power supply of claim 20, wherein said switch varies a charge transfer between the first and second capacitors when one of said first and second capacitors is charged in a first direction, and is prevented from varying a charge transfer between first and second capacitors when said one of said first and second capacitors is charged in a second direction opposite said first direction.